

(a) R_f is a fluoroaliphatic radical containing up to 20 carbon atoms and

(b) R₄ is selected from the group consisting of:

- (i) alkaline earth metal;
- (ii) alkali metal; and
- (iii) ammonium cation.

39. (Amended) The delayed-action insecticide composition of claim 38 wherein said anionic fluoroochemical surfactant has a concentration of approximately 0.05 to 1.0% by weight.

40. (Amended) The delayed-action insecticide composition of claim 38 wherein said anionic fluoroochemical surfactant has a concentration of [is] approximately 0.1 to 0.5% by weight.

REMARKS

This reply is submitted under Rule 116 (37 C.F.R. § 1.116). The following comments are included in accordance with Rule 111 (37 C.F.R. § 1.111).

A petition for a one-month extension of time under Rule 136(a) (37 C.F.R. § 1.136(a)) accompanies this reply. Accordingly, the period for reply extends through December 14, 1998, since December 13, 1998 is a Sunday.

This Amendment is a result of a telephone interview with the Primary Examiner on December 10, 1998 and another telephone interview on December 12, 1998. This Amendment is being submitted at the request of the Primary Examiner. Favorable reconsideration of the rejection of the present application is requested in view of

Applicant's compliance with the requirement by the Primary Examiner to submit a formal Amendment as a condition precedent to reconsideration of his rejection of the application.

Claims 1-40 are pending in the present application. In the final Office Action, the Primary Examiner maintained his rejection of pending claims 1-11 on the ground of estoppel. Additionally, the Primary Examiner maintained his rejection of pending claims 12-40 under 35 U.S.C. § 103 as being unpatentable as obvious in view of the disclosure in Meer, et al., U.S. Patent No. 5,177,107 (hereafter referred to as "the Meer, et al. patent").

Claims 1-11 stand rejected on the ground of estoppel. Reconsideration of the rejection of claims 1-11 is requested in view of the amendments to pending independent claim 1, from which claims 2-11 depend, for following reasons.

On page 3 of the final Office Action, the Primary Examiner suggested that the Applicant "...amend the present claims so they are not open-ended (e.g., by deleting the term 'comprising' or 'comprises') and so that they exclude all active ingredients disclosed in the [Meer, et al.] patent." The Primary Examiner also suggested on page 3 of the final Office Action that "...in order to better delineate the claimed invention over the [Meer, et al.] patent, Applicant may wish to consider specifically excluding vegetable oils from the claims."

On the one hand, the Applicant has adopted the suggestion by

the Primary Examiner to amend independent claims 1, 12, 14, and 27 by substituting the term "consisting of" for the term "comprising" so that the composition and product by process defined by the claims are not open-ended. Therefore, favorable reconsideration of amended independent claim 1 and claims 2-11 which depend from claim 1, as well as independent claim 12 and claim 13 which depends from claim 12, independent claim 14 and claims 15-26 which depend from claim 14, and independent claim 27 and claims 28-40 which depend from claim 27, is respectfully requested. Also, claims 6, 9, 13, 20, 21, 34, and 35 have been amended to recite that an attractant, such as soybean oil, is not an essential element of the toxic bait defined by the independent claims.

On the other hand, the claims have not been amended as suggested by the Primary Examiner to exclude all active ingredients disclosed in the Meer, et al. patent. It has been previously conceded that the Meer, et al. patent discloses several compounds that reside within the class of anionic fluorochemical surfactants. The Applicant once again requests the Primary Examiner to note, however, that the invention defined by the claims is not directed to an anionic fluorochemical surfactant *per se*. Stated differently, the subject matter defined by the claims as amended is not directed solely to anionic fluorochemical surfactants as a class of toxins. Instead, the amended claims define a delayed-action insecticide bait which additionally consists of a nonliquid

or solid food carrier with which the anionic fluorochemical surfactant is combined to deliver that toxin to a target insect.

In fairness, while the Applicant concedes that the Meer, et al. patent discloses several species of anionic fluorochemical surfactants, the Primary Examiner must concede that the Meer, et al. patent does not disclose the incorporation of an anionic fluorochemical surfactant into a bait including a nonliquid or solid food carrier. Clearly, the statement by the Primary Examiner on page 2 of the final Office Action that "The [Meer, et al.] patent discloses compositions of matter comprising a solid food carrier (col. 3, line 35) impregnated with an anionic fluorochemical surfactant which is insoluble in vegetable oil (col. 1, line 55; col. 9 compd. 29779)" is at best a conclusion based initially on an impermissible fragmentation of the disclosure in the Meer, et al. patent and a subsequent reconstruction of the fragments in view of the teaching by the Applicant in the present application, rather than based on the teaching of the disclosure in the Meer, et al. patent as a whole.

In the first place, reference by the Primary Examiner to compound 29779 relates to Table 1 which is referred to in Example 1 in column 4 of the Meer, et al. patent. Example 1 is expressly directed to "Cotton swabs saturated with soybean oil containing 1.0% of a test compound [such as compound 29779]..." See, col. 4, lines 8-9 of the Meer, et al. patent. Example 1 nowhere discloses

or suggests combination of compound 29779 with a solid food carrier. On the contrary, the bait defined by the amended claims consists of an anionic fluorochemical surfactant combined with a nonliquid or solid food carrier.

In the second place, Example 1 suggests that compound 29779 is soluble in soybean oil as a liquid carrier for the toxin. Furthermore, the Examiner will note that all solid carrier baits disclosed in the Meer, et al. patent incorporate active ingredients which are soluble in vegetable oil. On the contrary, the amended claims specifically define that the active ingredient incorporated into the bait is not soluble in vegetable oil.

In the third place, the data expressly tabulated in the Meer, et al. patent discloses that compound 29779 produced substantially the same mortality as a soybean oil control, that is, 15% dead ants versus 13% dead ants, and, therefore, compound 29779 cannot be said to have exhibited efficacy. See, Table 1, cols. 9-10 and 15-16 of the Meer, et al. patent. On the contrary, the amended claims recite that an insecticidally effective amount of the anionic fluorochemical surfactant is contained in the nonliquid or solid food carrier bait.

Finally, the Primary Examiner ignores the express disclosure in the Meer, et al. patent at column 3, lines 41-44 that: "Preferred baits for fire ants are mixtures of edible oils (as solvents for the toxicant compounds) with granular carriers such as

corn cob grits, pregel defatted corn grits and the like)." See, also, col. 4, lines 34-37 and col. 5, lines 7-10 of the Meer, et al. patent. The rejection by the Primary Examiner based on hindsight coupled with his apparent disregard of what is expressly disclosed in the Meer, et al. patent renders his rejection clearly erroneous when the Meer, et al. patent is read as a whole. It is legal error to reconstruct an applicant's claimed invention from the prior art using the applicant's claims as a "blueprint." Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 227 USPQ 543 (Fed. Cir. 1985). In conclusion, the nonliquid or solid food carrier bait defined by the amended claims is unquestionably different from the baits disclosed in the Meer, et al. patent.

The bait defined by the amended claims is also non-obviousness in view of the disclosure in the Meer, et al. patent based on extrinsic evidence. The reason is simple and involves a straightforward three-step approach.

The first step is to understand that what is otherwise perceived as unpatentable under 35 U.S.C. § 103 as obvious can be overcome by establishing that the prior art teaches away from the claimed subject matter. Doing what the prior art tries to avoid is the very antithesis of obviousness. In re Buehler, 515 F.2d 1134, 185 USPQ 781 (CCPA 1975) and In re Rosenberger, 386 F.2d 1015, 156 USPQ 24 (CCPA 1967). Stated another way, doing what the prior art suggests that you should not do is the "epitome of unobviousness."

In re Hughes, 550 F.2d 1273, 193 USPQ 141 (CCPA 1977).

The second step is to comprehend the following probative facts. The Primary Examiner is requested to compare the disclosure in the Meer, et al. patent with the disclosure in the paper that appeared in the *Journal of Economic Entomology* that is of record in the present application. Such a review will establish beyond peradventure that: (1) the authors of the paper are also inventors named in the Meer, et al. patent; (2) the pertinent data disclosed in the Meer, et al. patent and the data disclosed in the paper are identical; and (3) the inventors named in the Meer, et al. patent arrived at the unequivocal conclusion in their paper based on the data that: "Consequently, oil solubility is an essential property for any potential RIFA [red imported fire ant] toxicant." See, page 1196 of the paper.

The third step is to consider the facts in view of the law relating to the prior art teaching away from the subject matter claimed as the invention. The simple truth is that this is an easy case to find unobviousness based on the prior art teaching away from the claimed subject matter. In the typical case, the argument that the prior art teaches away from the claimed subject matter is established by analysis of the prior art and distinguishing from the prior art by argument and/or independent expert declaration. Here, the inventors named in the Meer, et al. patent themselves have commented about the data in the Meer, et al. patent in a

contemporaneously published paper to the effect that the claimed subject matter of incorporating a vegetable-oil-insoluble active ingredient in a nonliquid or solid food carrier bait is contrary to the teaching of their Meer, et al. patent, because "...oil solubility is an essential property for any potential RIFA toxicant." This is incontrovertible evidence that the Meer, et al. patent teaches away from the subject matter claimed as the invention, since the inventors themselves have so stated.

Since the inventors named in the Meer, et al. patent have explicitly stated that oil solubility is an essential property for any potential nonliquid or solid food carrier bait toxicant because insoluble anionic fluorochemical surfactants are not suitable for toxicants that are formulated in baits, what the Applicant discovered is directly contrary to the explicit teachings of the prior art in view of the express statements published by the teachers themselves. Therefore, the amended claims must be allowed in view of the relevant law on the subject.

In view of the foregoing remarks, it is respectfully submitted that the Primary Examiner has not presented a *prima facie* case of obviousness with respect to claims 1-40 in view of the disclosure in the Meer, et al. patent. Nevertheless, the Applicant has submitted the Declaration of Sanford D. Porter Under Rule 132 (37 C.F.R. § 1.132) (hereafter referred to as "the Porter Declaration") filed in connection with the parent of the application which issued

as the patent that forms the basis for this reissue application. The Primary Examiner contended on page 3 of the final Office Action that: "There is no evidence of unexpectedly superior toxicity in the form of a side-by-side comparison in this declaration." The Primary Examiner has erroneously weighed the Porter Declaration for the following reasons.

In the first place, the inquiry into obviousness based on the disclosure in the Meer, et al. patent is whether or not the claimed subject matter is obvious in view of the disclosure in that patent, which contains data relating to tests of various proposed toxicants in various formulations, including apparent efficacy of a species of anionic fluorochemical surfactant formulated at a 1.0% concentration in vegetable oil and in honey/water (1:1) and tested against fire ants. See, Example 1, column 4, lines 8-15 and Example 3, column 4, lines 22-27 of the Meer, et al. patent. Insofar as is relevant, the disclosure in the paper referred to in the Porter Declaration is substantially the same as the disclosure in the Meer, et al. patent with respect to the compositions containing an anionic fluorochemical surfactant. Paragraphs 26 and 27 of the Porter Declaration detail the unexpected results obtained by an independent public testing agency as compared to the results disclosed in the Meer, et al. patent. Specifically, Dr. Porter concludes:

"The high mortality rates which I obtained during tests of the vegetable oil insoluble surfactant (sulfonate) toxicant

disclosed in the patent application of Mr. Milks are clearly unexpected in view of Vander Meer, et al., 1985." Porter Declaration, p. 13. (Emphasis supplied.)

Consequently, unexpected results were obtained when the toxic bait formulation in accordance with the amended claims was tested against fire ants and the test data were compared to the test data for the formulations disclosed in the Meer, et al. patent containing the same active ingredient (anionic fluorochemical surfactant). No side-by-side comparison is required to establish that the results obtained by Dr. Porter are unexpected in view of the disclosure in the Meer, et al. patent. In this regard, the Primary Examiner appears to be confused. Where no data appears in a prior art reference and unexpected results are claimed, then the Applicant concurs that side-by-side testing is required both to establish the results obtained by the prior art and the comparative results obtained by the claimed subject matter. Here, that was not required because the Meer, et al. patent expressly contains test data which substantiated the unexpected results of the claimed subject matter. It is therefore respectfully submitted that even if a *prima facie* case of obviousness has been presented by the Primary Examiner, this has been overcome by evidence of unexpected results produced by an independent testing agency. Consequently, the rejection of claims 1-40 should be withdrawn.

In any event, a side-by-side test was conducted under actual field conditions. See, Example 4 of the present application.

However, the Primary Examiner referred to Example 4 of the present application and contended on pages 3-4 of the final Office Action that: "A better prior art comparison would have been to compare a composition containing 1% FC-95, 95% dried yellow cornmeal, and 4% soybean oil, against a composition containing 1% vegetable oil soluble fluorochemical surfactant, 95% dried yellow cornmeal, and 4% soybean oil." The Primary Examiner has committed error for two reasons.

First, the Primary Examiner has nowhere rejected the claimed subject matter in view of a bait formulation disclosed in the Meer, et al. patent that incorporates a vegetable-oil-soluble toxicant. On the contrary, the Primary Examiner has only stated that: "The [Meer, et al.] patent discloses compositions of matter comprising a solid food carrier (col. 3, line 35) impregnated with an anionic fluorochemical surfactant which is insoluble in vegetable oil (col. 1, line 55; col. 9, compd. 29779)." (Emphasis supplied.) The Primary Examiner also stated that: "At example 3 therein, Meer stated that many oil-insoluble compounds may be highly effective in other compositions." (Emphasis supplied.) At no point has the Primary Examiner contended that the claimed subject matter is obvious in view of a bait consisting of a vegetable-oil-soluble toxin, and such a completely new ground of rejection would render the final Office Action improper.

Second, it is respectfully submitted that the closest prior

art is the incorporation of active ingredients which are insoluble in vegetable oil, rather than soluble in vegetable oil. Consequently, the side-by-side comparison which appears in Example 4 of the present application conclusively establishes that the claimed subject matter achieves unexpected results. Therefore, the rejection of claims 1-40 should be withdrawn.

For the foregoing reasons, it is respectfully submitted that claims 1-40 are allowable in view of the disclosure in the Meer, et al. patent, as well as the disclosures in the other references of record, whether those disclosures are considered singly or in combination. Therefore, a notice of allowance is earnestly solicited.

Respectfully submitted,

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